ILLINOIS COMMERCE COMMISSION

Rock Island Clean Line LLC)
Petition for an Order granting Rock Island)
Clean Line LLC a Certificate of Public)
Convenience and Necessity pursuant to)
Section 8-406 of the Public Utilities Act as a) Docket No. 12-0560
Transmission Public Utility and to Construct,)
Operate and Maintain an Electric Transmission)
Line and Authorizing and Directing Rock Island)
Clean Line Pursuant to Section 8-503 of the)
Public Utilities Act to Construct an Electric)
Transmission Line.	j

DIRECT TESTIMONY OF PAUL E. MARSHALL

1 Introduction 2 Q: What is your name and address. 3 A: My name is Paul E. Marshall and I live at 2310 East US Hwy 52, Serena, 4 Illinois 60549. 5 Q: How long have you lived at that address. 6 A: I have lived there since 1982. Actually, I lived there from 1949-1956 and 7 moved back to this address in 1982. 8 **Illinois Landowners Alliance NFP** What is the extent of your involvement with the Illinois Landowners 9 Q: 10 Alliance, NFP? 11 A: I was invited to serve on the Board and was elected as the organization's 12 Secretary. I also serve as a point person and local representative for the Serena 13 Township area. 14 What is the Illinois Landowners Alliance? Q: 15 A: The Illinois Landowners Alliance, NFP ("ILA") is a not-for-profit group 16 created to be an organized way to try to keep Rock Island Clean Line's power 17 line from being built on some of the best farm land in America. Membership at 18 the time this was written totaled about 300 and includes landowners directly 19 impacted by the project, people who have homes or property near the proposed 20 line, and a number of people in the area who are simply opposed to the project.

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ILA members own or lease over 100,000 acres.

Why have the landowners joined the ILA?

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Q:

A: Members have joined for a variety of reasons. Most recognize that this project is not needed to supply Illinois with reliable electric power and most, if not all of the power is going to the East Coast while ruining land here in Illinois. Some object to the damage expected from construction and subsequent maintenance activities on some of the most productive farms in the country. These concerns center on soil compaction. Some object to farm land being taken out of production. Some object to the ways that the line will interfere with modern farming techniques including the aerial application of materials essential for controlling weeds, insects, and diseases in the crops, the potential impacts to use of GPS-related devices and practices, and the operation of large tillage equipment in the vicinity of towers and other activities of Rock Island Clean Line within the easement areas.

Q: Are there non-agricultural concerns?

A: Yes. Some members are concerned about the unknown effects of electromagnetic forces from the HVDC lines on crop and on human physiology. Other members have joined out of concerns about potential damage to forests, wetlands, historical sites, and other conservation areas. Many members are concerned about the visual pollution the project would leave on our scenic rural landscapes. Many members, including me, are concerned about the limitations that the easement will put on future generations and their ability to use the land as they would like. The easement will restrict their ability or desire to build homes, build roads, or to engage in non-farming activities such as mining.

- Obviously there are many reasons why people are opposed to the project and
- have joined ILA to contribute in various ways to try to get it stopped.
- 47 Q: Many of the members of the ILA are farmers. For what other reasons
- are they opposed to the project?
- 49 A: Many of us who are opposed to this project have strong ties to and strong
- feelings about farming. Many farmers firmly believe that their mission is to help
- feed a hungry world and that mission gets more difficult with the intrusion of a
- 52 project such as Rock Island Clean Line's project on their farming operations.
- 53 Some ILA members have a long history on the same acreage. I'm the 4th
- 54 generation owner of the land that this project wishes to cross. It's very
- distressing to think that I will not be allowed to pass this farm to my children in
- the condition as when I inherited it.
- 57 The objections we have are neither about the money to be paid for the
- 58 potential easement, nor about the details of the Agricultural Impact Mitigation
- 59 Agreement. The objections center on the imposition of this project on some of
- 60 the best farm ground on the planet. Others before us must have recognized this
- and created a mandate for the Illinois Commerce Commission to preserve farm
- land where and when possible. We hope they follow that mandate in deciding
- this case.
- 64 Q: You have provided some detail about the numbers of members and
- 65 the amount of acreage in which the ILA members have property interests.
- 66 How are you aware of such numbers?

- 67 A: An ILA representative keeps records of each member and this
- 68 membership information is reviewed by the Board of Directors at most meetings.
- 69 As I noted above, I am the Secretary of the organization and attend such
- meetings and take part in the review.
- 71 Q: Do you have any exhibits to provide to the Commission?
- 72 A: A list of many current ILA members is included with my testimony as ILA
- Exhibit 1.01. As the exhibit shows, the ILA members have ownership interests in
- over 67,000 acres and rental interests in over 39,000 acres of Illinois land. Most
- of the land owned and rented is farm land.

76 <u>Testimony Concerning Proposed Project</u>

- 77 Q: You mentioned that you are the Secretary of the Illinois Landowners
- 78 Alliance, NFP. What else do you do for a living?
- 79 A: Since 2009, I have been employed by First National Bank of Ottawa as its
- 80 Farm Manager.
- 81 Q: What do you do in that position consist?
- 82 A: I currently manage fifty-four farm parcels totaling about 6,000 acres for the
- bank. During my tenure as the bank's farm manager, I've been involved in many
- farm appraisals, several farm land sales, and several estate settlements involving
- 85 farm land.
- 86 Q: What else do you do?
- 87 A: I assumed the management of both of my families' farms when my father
- died in 1975. Both were operated as 50/50 crop shares until just recently. I also

- 89 have been active in the real estate market, buying and rehabilitating homes for
- 90 resale.
- 91 Q: Tell us about your educational background.
- 92 A: I have a Bachelors degree from the University of Illinois College of
- 93 Agriculture and a Ph. D. in forestry and botany (plant physiology) from the
- 94 University of Wisconsin.
- 95 Q: What other relevant employment have you held?
- 96 A: I taught and did research at the University of Michigan from 1975-1982.
- Additionally, I was a financial consultant in Naperville, Illinois from 1982-2007, at
- which time I was simultaneously living on and managing the farms.
- 99 Q: In light of your professional, agricultural, and educational
- background, is it fair to say that you are well versed in farming operations,
- 101 farm values, and plant growth?
- 102 A: Yes.
- 103 Q: Tell us about the farms you mentioned before.
- 104 A: The family farms consist of a 200 acre farm that has been in my family
- since 1879. I am the 4th generation of the same family to occupy the same farm
- house. It obviously has a lot of family history. At present, I own the home and
- outbuildings and about 98 tillable acres. My sister, Karen Borchsenius, owns
- about 98 tillable acres.
- 109 Q: Is this a so-called centennial farm?
- 110 A: Yes.
- 111 Q: Do you intend to keep the farm in the family?

- 112 A: Yes. I am 64, and my wife is 67. Both of my children have expressed
- their interest in living on the family farm in the future.
- 114 Q: How does the land perform?
- 115 A: The 196 acres of tillable land are of some of the best farm ground in
- northern Illinois. In the last 5 years we have averaged over 200 bushels of corn
- per acre. Since I inherited part of this farm, I've had the philosophy that I'm just
- the steward for it during my lifetime and it will be passed to my children, and
- hopefully on to theirs. I see it as my responsibility to maintain the productivity
- and improve upon it whenever possible. In doing so, I can preserve the family
- farm for future generations.
- 122 Q: Do you own any other farmland?
- 123 A: Yes. My sister and I own 205 acres in Dayton township that has about
- 124 160 tillable acres.
- 125 Q: Why are you submitting this testimony?
- 126 A: In order to present evidence in opposition to the Rock Island Clean Line
- 127 project.
- 128 Q: Do you oppose the entire project?
- 129 A: Yes.
- 130 Q: Why do you oppose the project?
- 131 A: Rock Island's proposed route places the power line on my property for at
- least one mile. Further, the line would only be 1,000 feet away from my home.
- Additionally, the route will impact the farming operations.
- 134 Q: How will it impact the farm?

- A: Power line construction will impact the future productivity and potential future value of the farmland. In particular I'm concerned about the soil compaction caused by concrete truck traffic and the impact that will have on water drainage from surrounding acreage. We've had bad experience on this farm in Serena, and I've had bad experiences from this on other farms that I manage.
- 141 Q: What kind of experiences?
- A: In 2008, Enbridge Energy obtained a 1,300 foot long easement by eminent domain condemnation proceedings that allowed for the placement of two pipelines along the eastern edge of the Serena farm. One was forty-two inches in diameter and was to carry oil/sand/slurry from Canada and the other was twenty inches in diameter and was to carry a diluting agent back to Canada.
- 147 Q: Was the equipment used particularly large?
- 148 A: No. No exceptionally heavy vehicles were used in the Enbridge pipeline construction.
- 150 Q: How did this affect the farm?
- 151 A: Prior to the pipeline construction, we had no drainage issues on that part
- of the farm. Afterwards, we had a persistent lake of about .75 to 1.25 acres
- 153 following rain storms that was very slow to drain.
- 154 Q: Did Enbridge undertake any remedial measures to attempt to prevent
- 155 such issues?
- 156 A: Yes. Enbridge used deep rippers to break up compaction, sent
- 157 Caterpillar® tractors to add slope to the area, constructed a berm, planted grass,

158 and finally installed additional drain tile to try to fix the recurring problem. 159 Enbridge did pay for crop damage for several years, but to this day, the drainage 160 in that area is not as good as it was before the pipeline construction. 161 Additionally, every two years I try to further rip and till the soil, and the drainage 162 problem persists. 163 Q: As a long time farm owner, with the educational background you 164 have, what is your opinion as to why this occurs? 165 My experience with soils suggests that the truck and equipment traffic on A: 166 the roadway next to the pipeline trench compacted the particular soils on this 167 farm so badly that water could not percolate and drain and oxygen could not 168 reach roots. 169 Q: Do you have any other professional experience with construction 170 across agricultural land? 171 A: Yes. As I stated before, I am the Farm Manager for the First National 172 Bank of Ottawa. The Bank is trustee for an 80 acre parcel in southeastern 173 LaSalle County that had a windmill constructed on it for in 2008. Since that time. 174 we have had many problems resulting from damage caused by the construction. 175 We had extensive soil compaction, collapsed drain tile, and an obstructed 176 waterway. The construction and use of a temporary road through a drainage 177 waterway resulted in ponding. In the past four plus years, the bank has 178 requested the company pay crop damage and to effect the necessary repairs.

The company paid to have tile repaired, but the compaction and blocked

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- waterway persist. In my position as Farm Manager, I have had to appeal to the
- local Soil and Water Conservation District personnel.
- 182 Q: Did this affect the land's value?
- 183 A: Yes. The bank has been forced to charge below-market cash rent for the
- parcel as the problems reflect in reduced crop yields.
- 185 Q: You understand the difference in construction of wind turbines
- versus HVDC towers though, correct?
- 187 A: Yes, I do. While there may be a marked difference, I have seen that
- 188 construction activities of any large scale can result in economic losses in this
- case, lost income to a trust that can be quite long-lived.
- 190 Q: Have you had any other professional experiences with easements,
- and not just construction?
- 192 A: Yes. Again, as Farm Manager, I have seen approximately 126 acres of
- 193 foreclosed farmland sell for approximately \$700.00 per acre below my
- 194 expectations. I believe that this lowered amount was primarily because of an
- 195 easement across the farm for a city sewer line and lift station. There was no
- 196 particular hazard, but it represented an obstacle that needed to be farmed
- around along with periodic access for maintenance and repairs.
- 198 Q: What does this have to do with the Rock Island Clean Line project?
- 199 A: For the Rock Island power line, it can reasonably be expected that a
- 200 number of concrete trucks each weighing in excess of 65,000 pounds will
- traverse nearly a mile of land. In doing so, they will compact the soil, and cause
- similar exceptional drainage issues which extend far beyond the right-of-way it

- seeks. Past experience shows that this soil is not amenable to remedial efforts to return it to its former state.
- 205 Q: How many trucks will be traversing your land?
- A: According to RICL's specifications for the monopole towers, each would require a concrete base about thirty-four feet deep and seven feet in diameter.

 This equates to just under 48.5 cubic yards of concrete. My experience is that a typical fully loaded concrete truck carries about eight cubic yards of concrete, weighing around 65,000 pounds. Therefore, if there were six towers on the farm, there would thirty-six fully loaded concrete trucks traversing part of my farm.
- 212 Q: Does field tile help?

- A: Yes. Prior to modern settlement, the land around Serena, including my farm, was swampy and covered with tall grass. However, it can be productively farmed today because it is drained by a system of underground tiles of various diameters. My grandfather had clay tile installed in the early 1930's. Today, those tile are still functional but occasional inspection, needed because of rare tile failure, has indicated that they are cracked and quite brittle. For example, I repaired a four foot long section of twelve inch diameter clay tile that had collapsed in the southwestern corner of the farm in May, 2013. Each of the damaged tile was broken into four pieces. Indications suggest that this damage was done from prior traffic across the field from farm equipment, sprayers, fertilizer applicators, prior pipeline trucks but nothing nearly as heavy as a fully loaded concrete truck.
- Q: Can tile failure occur without heavy concrete trucks?

A: Yes, tile failure happens occasionally. However, I fully expect that the concrete truck traffic and other vehicle traffic across my fields will cause extensive damage and eventual collapse of numerous drain tile. Modern plastic tile is far less susceptible to collapse compared to the brittle older clay tile that is under the surface of my farm. Impaired drainage caused by broken tile will usually eventually show up as a large hole in the ground which, if run into, can cause significant damage to expensive farm equipment. But before that happens, crop production can be impaired by excessive moisture in the soil, especially with soybeans. Ultimately I'm concerned about the future cost of maintaining an effective tile drainage system and about the cost of lost crop production if that drainage system is not working properly.

237 Q: Would you immediately see the effects of broken drainage tile?

A: If at the time of the collapse, it was particularly wet, the results may show up immediately. However, it is just as likely that the adverse effects of tile collapse will not be seen until long after construction has completed.

Q: Does this relate to the earlier issues regarding compaction?

A: Yes. Deep soil compaction could also alter the deeper movement of water through the soil profile. This would create wet areas where none existed before, which would create the need for additional drain tile.

245 Q: Can Rock Island adequately compensate you for these changes?

A: According to Rock Island Clean Lines's previous representations, it is offering to pay substantial sums for the easement based on today's value, as well as attempt to remediate problems such as compaction and tile issues. However,

the problems from extensive soil compaction and altered drainage could be expected to last a large number of years and could be expected to limit crop productivity on the affected acreages. Additionally, this particular soil has shown that it is unable to be adequately remediated.

253 Q: Have you been involved, professionally, in any other situations that

support your concerns?

A: Yes. For example, my concerns about soil compaction are not limited to just the construction phase. I manage a farm in a nearby county, in my capacity as farm manager for my employer. In the spring of 2012, Ameren Illinois notified me that it needed to effect some repairs on an existing power line that crossed the field.

Ameren's repairers entered the field with a crawler tractor while the soil was wet. When the crawler got stuck, Ameren made use of heavier equipment to extract the first stuck vehicle. In the end, Ameren left a muddy mess of ruts and deep holes. Despite 2012's exceptional dryness, the area Ameren damaged was wet for most of the year.

Q: Why was the soil still wet?

A: Compaction. Farm soils are much more susceptible to compaction problems when wet, and the damage done by Ameren will negatively impact the crop productivity of that particular area for many years. While Ameren did pay some amount for crop damage in the 2012 year, the damage done to the soil structure was much more severe.

Q: Do you have other examples?

- 272 A: Yes. I could give several other examples of situations where pipeline or 273 power line repairs were needed to existing facilities and significant damage was 274 done to crops and to soils.
- 275 Q: Do you harbor concerns other than drainage and soil compaction?
- 276 A: Yes. I am concerned that the presence of the Rock Island Clean Line 277 power line will limit my ability to combat insects and diseases that could 278 devastate a crop.
- 279 Have you had this issue, or seen this issue in the past? Q:

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- 280 A: Yes. In 2012, the farm suffered from a particularly large infestation of Japanese beetles in the soybeans when the plants were in a particularly 282 susceptible stage of growth. To combat the beetles, we applied insecticides. 283 Because the plants were small, we could choose whether to apply the 284 insecticides using ground sprayers or from the air using airplanes.
 - However, later in the season, the Japanese beetles moved into the corn and were aggressively devouring the male pollen tubes (silks) of the developing corn ears which, if left unchecked, would greatly limit seed development. Since the corn was very tall at this point, there was no choice other than to use aircraft for the insecticide application. Without the beetle control, our crop would have been devastated.
- 291 Q: Does the proposed project affect your ability to protect your crops?
 - A: Yes. The presence of Rock Island's proposed power line will greatly limit the ability to use aerial application of such chemicals. We alternate corn and soybean production annually on our fields. The line would affect our ability to do

so, because we would not be able to pick and choose which specific crops to plant in the near proximity to the power line. It would not fit our cropping plan either economically or biologically to put just soybeans under the powerline perennially.

Q: Are there other reasons you oppose the line?

A: Yes, I'm concerned about the loss of future opportunities to my children or grandchildren. As I stated before, I have no plans to sell any of this centennial farm ground during my lifetime and fully intend to leave it to later generations. One of my children or grandchildren might wish to build a home on some part of the farm at some point in the future or may wish to occupy my home after I no longer live there. They have already indicated a negative response to living close to a large power line. The presence of the power line may greatly limit their choices as to where they might build any kind of structure, place roads or runways, or choose some other form of land use such as mining.

Q: Is there mining in the area?

A: Yes. There is a functioning gravel mining operation less than 0.8 miles to the south of my farm and another functioning gravel mining operation about one mile to the east of my farm. Although I have not done any test borings, I'm quite sure there are economically significant gravel deposits under my property as well. At some point in the future, such mining could become the best use of this land but that could greatly be limited by the presence of the power line and its easement. There are active silica sand mines just east of my farm land in

- Dayton Township. For example, in 2012, a neighbor sold farm land to Fairmount
- 318 Minerals for a price in excess of \$25,000 per acre.
- 319 Q: Have you been approached for similar reasons?
- A: Yes. I was approached by a competitor of Fairmount's in 2012 about selling some of my farm land for silica sand mining. During the discussion, I disclosed that the Dayton farm has three pipeline easements and two powerline easements encumbering the property. No agreement was reached, significantly due to the easements. The Rock Island Clean Line easement would do the same to the future value of my Serena farm.

Q: Is this your personal or professional opinion?

A: Both. As mentioned above, I became active in the residential real estate market in 2007 and still am active. Over the past six years, I've looked at hundreds of homes in various communities for investment opportunities and even without the well-known fact that homes near powerlines are valued significantly lower, I have seen first-hand what the close proximity of power lines can do to the value of a home. For example, I investigated several homes on Hoffman Street in Plano, Illinois. A large powerline with the lattice type towers ran adjacent to the back yards of some of these homes and I know first hand that their presence was an extremely strong influence on my decision not to buy one of those homes. I specifically told the realtor not to show me any other homes close to power lines. I strongly believe that the presence of Rock Island Clan Line's power line close to my home will greatly impact its desirability by my kids,

grandkids, or any future buyer. I fear that the Rock Island Clean Line power line will greatly limit the future value and utility of the Serena farm for my children.

Q: Are you concerned about the natural beauty of the land?

A: Yes, I'm concerned about what the Rock Island Clean Line power line will do to the scenic vista from the deck in my back yard and to my overall quality of life and to my desire to stay in my ancestral family home. My house sits about a half mile north and a mile west of the Fox River valley. I can look to the south, across a field of incredible productivity, and see the timber on both sides of the Fox River valley. I can look to the southeast and see fields, timber, the Fox River Resort, and other farmsteads for a distance of several miles. It is truly beautiful. The Rock Island power line will destroy these views.

I left Ann Arbor Michigan in 1982 and chose to accept the inconveniences of living in a rural area because the pastoral rural setting was very, very important to me. I also feel a strong connection to the farm that we are helping to feed a hungry world and are growing great quantities of very high quality products. We are producing something good and tangible. I grew up in the same house, and although I know things can change, I wanted to maintain the same farm setting that I had as a child for me and for my family. Fortunately my children grew up and left home before the land could be despoiled by this power line. I, however, still live there and truly love what I see from my back yard. The thought of having lost the control to maintain that view is very painful.

Q: Have you reviewed the Agricultural Impact Mitigation Agreement that Rock Island Clean Line and the Illinois Department of Agriculture signed?

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- 363 Q: Has this alleviated your concerns?
 - A: No. In fact, the knowledge that temporary and permanent roads will be used has actually re-affirmed my concerns listed above. In addition, there is no guaranty provided that Rock Island Clean Line will not traverse wet ground. Traversing wet ground in the area of the line, with the equipment needed for this project will result in compaction that no amount of remedial efforts can address. Certainly a mere eighteen inch rip will not address the compaction. This irreparable compaction will reduce crop yields for many years after the initial construction. The Agreement also omits many items that would need to be covered by the construction and ongoing presence of a high voltage power line on farm land.

374 Conclusion

- 375 Q: Does this conclude your testimony?
- 376 A: Yes.